**WHAT IS CLAIMED IS:**

1. A drive circuit of an electrooptic device that supplies a display portion wherein pixels are constructed in a matrix shape out of an electrooptic material whose transmission factor for light is variable by application of a voltage, with an ON voltage capable of saturating the transmission factor or an OFF voltage capable of bringing the electrooptic material into a non-transmissive state, thereby to implement subfield drive in which a gradation is expressed in accordance with states of a light transmissive state and the non-transmissive state of the electrooptic material in a unit time, and a time ratio of the states, comprising:

drive means for setting as control units a plurality of subfields into which a field period is divided on a time base, for setting a time period of each of the subfields to be shorter than a saturation response time which is required for saturating the transmission factor of the electrooptic material in the case of applying the ON voltage, and for determining on the basis of display data the subfields to apply the ON voltage therein and the subfields to apply the OFF voltage therein, thereby to express the gradation.

2. A drive circuit of an electrooptic device according to Claim 1, wherein that the saturation response time of the electrooptic material is shorter than a field period of the display data.

3. A drive circuit of an electrooptic device that supplies a display portion wherein pixels are constructed in a matrix shape out of an electrooptic material whose transmission factor for light is variable by application of a voltage, with an ON voltage capable of saturating the transmission factor or an OFF voltage capable of bringing the electrooptic material into a non-transmissive state, thereby to implement subfield drive in which a gradation is expressed in accordance with states of a light transmissive state and the non-transmissive state of the electrooptic material in a unit time, and a time ratio of the states, comprising:

drive means for setting as control units a plurality of subfields into which a field period is divided on a time base, for setting a time period of each of the subfields to be shorter than a non-transmission response time which is required for shifting the transmission factor of the electrooptic material from a saturated state into the non-transmissive state in the case of applying the OFF voltage, and for determining on the basis of display data the subfields to apply the ON voltage therein and the subfields to apply the OFF voltage therein, thereby to express the gradation.

4. A drive circuit of an electrooptic device according to Claim 3, wherein that the non-transmission response time of the electrooptic material is shorter than a field period of the display data.

5. A drive circuit of an electrooptic device according to Claim 1 or 3, characterized in that said drive means applies the ON voltage to the electrooptic material in successive or non-successive subfields so that an integral value of the transmissive state of the electrooptic material in the pertinent field period may correspond to the display data.

6. A drive circuit of an electrooptic device according to Claim 1 or 3, wherein that the plurality of subfields within each field are set at substantially the same time width.

7. A drive circuit of an electrooptic device according to Claim 1 or 3, wherein that the saturation response time is a time period which is not shorter than three subfield periods.

8. A drive circuit of an electrooptic device according to Claim 1 or 3, wherein that the non-transmission response time is a time period which is not shorter than three subfield periods.

9. A drive circuit of an electrooptic device according to Claim 1, wherein that the ON voltage is applied to the electrooptic material in concentrated fashion in subfield periods on the lead side of the field period.

10. A drive circuit of an electrooptic device according to Claim 3, wherein that the OFF voltage is applied to the electrooptic material in concentrated fashion in subfield periods on the end side of the field period.

11. A drive method of an electrooptic device that supplies a display portion wherein pixels are constructed in a matrix shape out of an electrooptic material whose transmission factor for light is variable by application of a voltage, with an ON voltage of, at least, a saturation voltage capable of saturating the transmission factor or an OFF voltage capable of bringing the electrooptic material into a non-transmissive state, thereby to implement subfield drive in which a gradation is expressed in accordance with states of a light transmissive state and the non-transmissive state of the electrooptic material in a unit time, and a time ratio of the states, comprising setting as control units a plurality of subfields into which a field period is divided on a time base, setting a time period of each of the subfields to be shorter than a saturation response time which is required for saturating the transmission factor of the electrooptic material in the case of applying the ON voltage, and determining on the basis of display data the subfields to apply the ON voltage therein and the subfields to apply the OFF voltage therein, thereby to express the gradation.

12. A drive method of an electrooptic device that supplies a display portion wherein pixels are constructed in a matrix shape out of an electrooptic material whose transmission factor for light is variable by application of a voltage, with an ON voltage of, at least, a saturation voltage capable of saturating the transmission factor or an OFF voltage capable of bringing the electrooptic material into a non-transmissive state, thereby to implement subfield drive in which a gradation is expressed in accordance with states of a light transmissive state and the non-transmissive state of the electrooptic material in a unit time, and a time ratio of the states, comprising:

setting as control units a plurality of subfields into which a field period is divided on a time base, setting a time period of each of the subfields to be shorter than a non-transmission response time which is required for shifting the transmission factor of the electrooptic material from a saturated state into the non-transmissive state in the case of applying the OFF voltage, and determining on the basis of display data the subfields to apply the ON voltage therein and the subfields to apply the OFF voltage therein, thereby to express the gradation.

13. A drive method of an electrooptic device according to Claim 11 or 12, wherein that the gradation is expressed by applying the ON voltage to the electrooptic material in successive or non-successive subfields so that an integral value of the transmissive state of the electrooptic material in the pertinent field period may correspond to the display data.

14. A drive method of an electrooptic device that divides each field into a plurality of subfields on a time base, and controls and drives a plurality of pixels which include an electrooptic material enclosed in intersection areas between a plurality of data lines and a plurality of scanning lines, by an ON voltage or an OFF voltage every subfield in accordance with display data, whereby the respective pixels display gradations within one field, comprising:

setting a time period of each of the subfields to be shorter than a saturation response time which is required for saturating the transmission factor of the electrooptic material in the case of applying the ON voltage, and determining on the basis of the display data the subfields to apply the ON voltage therein and the subfields to apply the OFF voltage therein.

15. An electrooptic device comprising the drive circuit of an electrooptic device according to Claim 1 or 3.

16. An electrooptic device having:

pixels which include pixel electrodes disposed in correspondence with intersections between a plurality of scanning lines and a plurality of data lines, switching elements for controlling voltages to be applied to the respective pixel electrodes, an electrooptic material enclosed in intersection areas between the plurality of data lines and the plurality of scanning lines, and a counter electrode arranged in opposition to the pixel electrodes, and

drive means for supplying an ON voltage of, at least, a saturation voltage capable of saturating a transmission factor of the electrooptic material or an OFF voltage capable of bringing the electrooptic material into a non-transmissive state, thereby to implement subfield drive in which a gradation is displayed in accordance with states of a light transmissive state and the non-transmissive state of the electrooptic material in a unit time, and a time ratio of the states, wherein that:

the drive means sets as control units a plurality of subfields into which a field period is divided on a time base, sets a time period of each of the subfields to be shorter than a saturation response time which is required for saturating the transmission factor of the electrooptic material in the case of applying the ON voltage, and determines on the basis of display data the subfields to apply the ON voltage therein and the subfields to apply the OFF voltage therein, thereby to express the gradation.

17. An electronic equipment comprising an electrooptic device according to Claim 15 or 16.

18. A drive method of an electrooptic device that divides each field into a plurality of subfields on a time base, and drives a plurality of pixels which include an electrooptic material enclosed in intersection areas between a plurality of data lines and a plurality of scanning lines, by an ON voltage or an OFF voltage in each of the subfields in accordance with gradation data, whereby the respective pixels are brought into transmissive states or non-transmissive states so as to display gradations within one field by a subfield drive scheme; characterized by:

performing control so that pulse signals for bringing the respective pixels into the transmissive states may be concentrated in the first half of the pertinent field.

19. A drive method of an electrooptic device according to Claim 18, wherein that, in a case where display content changes at changeover of fields in displaying a dynamic picture image, the pulse width of the pulse signals for bringing the pixels into the transmissive states in a later field is altered in accordance with the direction in which the brightness of the screen changes.

20. A drive method of an electrooptic device according to Claim 18, wherein that pulse signals for bringing the respective pixels into the non-transmissive states are outputted in, at least, the last of the subfields of the pertinent field.

21. A drive method of an electrooptic device according to Claim 18, wherein that the pulse width of the pulse signals for bringing the pixels into the transmissive-states is altered in each field in accordance with the temperature of the electrooptic material itself or the ambient temperature of the electrooptic material.

22. A drive circuit of an electrooptic device having pixels which include:

pixel electrodes disposed in correspondence with intersections between a plurality of scanning lines and a plurality of data lines,

switching elements for controlling voltages to be applied to the respective pixel electrodes,

an electrooptic material enclosed in intersection areas between the plurality of data lines and the plurality of scanning lines, and

a counter electrode arranged in opposition to the pixel electrodes;

wherein the drive circuit divides each field into a plurality of subfields on a time base, and drives the pixels by an ON voltage or an OFF voltage in each of the subfields in accordance with gradation data, whereby the respective pixels are brought into transmissive states or non-transmissive states so as to display gradations within one field by a subfield drive scheme, comprising:

control means for performing control so that pulse signals for bringing the respective pixels into the transmissive states may be concentrated in the first half of the pertinent field.

23. A drive circuit of an electrooptic device according to Claim 22, wherein that, in a case where display content changes at changeover of fields in displaying a dynamic picture image, the control means alters the pulse width of the pulse signals for bringing the pixels into the transmissive states in a later field in accordance with the direction in which the brightness of the screen changes.

24. A drive circuit of an electrooptic device according to Claim 22, wherein that the control means outputs pulse signals for bringing the respective pixels into the non-transmissive states, in, at least, the last of the subfields of the pertinent field.

25. A drive circuit of an electrooptic device according to Claim 22, further comprising:

temperature detection means for detecting the temperature of the electrooptic material itself or the ambient temperature of the electrooptic material; and

pulse width correction means for making corrections so that the pulse width of the pulse signals for bringing the pixels into the transmissive states as is predetermined in correspondence with each gradation may be altered on the basis of a detection output of the temperature detection means in each field.

26. An electrooptic device comprising:

pixels which include pixel electrodes disposed in correspondence with intersections between a plurality of scanning lines and a plurality of data lines, switching elements for controlling voltages to be applied to the respective pixel electrodes, an electrooptic material enclosed in intersection areas between the plurality of data lines and the plurality of scanning lines, and a counter electrode arranged in opposition to the pixel electrodes;

a scanning line drive circuit which supplies scanning signals for dividing each field into a plurality of subfields on a time base, and for rendering the switching elements conductive in each of the plurality of subfields, to the scanning lines;

a data line drive circuit which supplies binary signals for designating an ON voltage or an OFF voltage of the pixels and thus bringing the pixels into transmissive states or non-transmissive states on the basis of gradation data in each of the subfields, to the data lines corresponding to the pertinent pixels, the binary signals being supplied in time periods in which the scanning signals are respectively supplied to the scanning lines corresponding to the pertinent pixels; and

control means for controlling the data line drive circuit so that pulse signals for bringing the respective pixels into the transmissive states may be concentrated in the first half of each field.

27. An electrooptic device according to Claim 26, wherein that, in a case where display content changes at changeover of fields in displaying a dynamic picture image, the control means alters the pulse width of the pulse signals for bringing the pixels into the transmissive states in a later field in accordance with the direction in which the brightness of the screen changes.

28. An electrooptic device according to Claim 26, wherein that the control means outputs pulse signals for bringing the respective pixels into the non-transmissive states, in, at least, the last of the subfields of the pertinent field.

29. An electrooptic device according to Claim 26, further comprising:

temperature detection means for detecting the temperature of the electrooptic material itself or the ambient temperature of the electrooptic material; and

pulse width correction means for making corrections so that the pulse width of the pulse signals for bringing the pixels into the transmissive states as is predetermined in correspondence with each gradation may be altered on the basis of a detection output of the temperature detection means in each field.

30. An electronic equipment comprising an electrooptic device according to any of Claims 26 through 29.

31. A drive method of an electrooptic device that divides each field into a plurality of subfields on a time base, and controls and drives the subfields for bringing into a transmissive state each of a plurality of pixels which include an electrooptic material enclosed in intersection areas between a plurality of data lines and a plurality of scanning lines, by an ON voltage or an OFF voltage in accordance with display data, whereby the respective pixels display gradations within one field by a subfield drive scheme; characterized by:

bringing at least one of the subfields in which the pertinent pixel is to be brought into the transmissive state and which are successively arranged in the first half of the pertinent field on the basis of the display data, into a non-transmitting condition in conformity with rules stipulated by the display data.

32. A drive method of an electrooptic device according to Claim 31, wherein that, among the subfields in which the pertinent pixel is to be brought into the transmissive state and which are successively arranged in the first half of the pertinent field on the basis of the display data, at least one subfield other than the subfield where the transmissive state starts but which lies in the vicinity thereof is brought into the non-transmitting condition in conformity with the rules stipulated by the display data.

33. A drive method of an electrooptic device according to Claim 31, wherein that, among the subfields in which the pertinent pixel is to be brought into the transmissive state and which are successively arranged in the first half of the pertinent field on the basis of the display data, at least one subfield other than the subfield where the transmissive state ends but which lies in the vicinity thereof is brought into the non-transmitting condition in conformity with the rules stipulated by the display data.

34. A drive circuit of an electrooptic device having pixels which include:

pixel electrodes disposed in correspondence with intersections between a plurality of scanning lines and a plurality of data lines,

switching elements for controlling voltages to be applied to the respective pixel electrodes,

an electrooptic material enclosed in intersection areas between the plurality of data lines and the plurality of scanning lines, and

a counter electrode arranged in opposition to the pixel electrodes;

wherein the drive circuit controls the subfields for bringing each of the pixels into a transmissive state, by an ON voltage or an OFF voltage, whereby the respective pixels display gradations within one field by a subfield drive scheme; comprising:

control means for performing control so that at least one of the subfields in which the pertinent pixel is to be brought into the transmissive state and which are successively arranged may be brought into a non-transmitting condition.

35. An electrooptic device comprising:

pixels which include pixel electrodes disposed in correspondence with intersections between a plurality of scanning lines and a plurality of data lines, switching elements for controlling voltages to be applied to the respective pixel electrodes, an electrooptic material enclosed in intersection areas between the plurality of data lines and the plurality of scanning lines, and a counter electrode arranged in opposition to the pixel electrodes;

a scanning line drive circuit which supplies scanning signals for dividing each field into a plurality of subfields on a time base, and for rendering the switching elements conductive in each of the plurality of subfields, to the scanning lines; and

control means for controlling a data line drive circuit so that pulse signals for bringing the respective pixels into transmissive states may be concentrated in the first half of the field, and that at least one of the pulse signals which bring the pixels into the transmissive states and which are successively arranged may be brought into a non-transmitting condition in accordance with display data.

36. An electronic equipment comprising an electrooptic device according to Claim 35.